

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

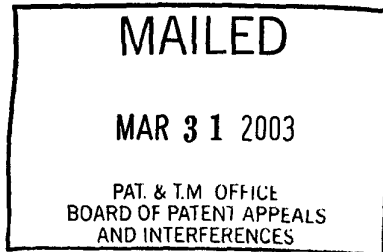
Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* GEORGE BENDA

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Appeal No. 2002-1649  
Application No. 09/405,781

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Heard: March 18, 2003

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Before GARRIS , WARREN, and TIMM, *Administrative Patent Judges*.  
TIMM, *Administrative Patent Judge*.

***DECISION ON APPEAL***

This appeal involves claims 1-15, which are all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 134.

***THE CLAIMED SUBJECT MATTER***

Claims 1 and 10 are illustrative of the subject matter on appeal:

1. A device for purifying air comprising:

a reactor;

a photocatalyst located in said reactor;

an ultraviolet light source located in said reactor, said ultraviolet source illuminating said photocatalyst;

a heater means located in said reactor for drawing air into said reactor by convection and causing said air to rise past said photocatalyst before being expelled.

10. A compact device with a base and a top for purifying air that is plugged directly into a wall power outlet comprising a set of power prongs protruding from the device for plugging into the wall outlet, a compartment containing a photocatalyst that is illuminated by an ultraviolet light source, and opening at the base of the device for air to enter, a heater means in the device near this opening for heating air entering the device and causing this air to rise past the illuminated photocatalyst, the air becoming purified, and an exit port at the top of the device for the purified air to exit.

***THE EVIDENCE***

As evidence of unpatentability, the Examiner relies upon the following prior art

references:

Dimitrik	3,844,741	Oct. 29, 1974
Goswami	5,835,840	Nov. 10, 1998 (filed Sep. 6, 1995)
Yamanaka et al. (Yamanaka)	5,919,422	Jul. 6, 1999 (filed Jul 26, 1996)

### ***THE REJECTIONS***

Claims 1, 3, 6, 7, and 9 stand rejected under 35 U.S.C. § 102(e) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Goswami. Claims 1 and 3-14 stand rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Yamanaka. Claims 2, 10, 11, 13, and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goswami. Claims 2 and 10 also stand rejected under 35 U.S.C. § 103(a) over Goswami in view of Dimitrik. Claims 15 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamanaka. We reverse the decision of the Examiner with respect to all the rejections for the following reasons.

### ***OPINION***

Claim 1 recites “a heater means located in said reactor for drawing air into said reactor by convection and causing said air to rise past said photocatalyst before being expelled.” Claim 10, the only other independent claim, recites “a heater means in the device near this opening for heating air entering the device and causing this air to rise past the illuminated photocatalyst.” Because these limitations are expressed in “means plus function” language and because they do not recite definite structure in support of the recited function, they are subject to the requirements of 35 U.S.C. §112, ¶ 6. *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1899 (Fed. Cir. 1997).

As pointed out by Appellant, the Examiner has failed to properly construe the means plus function limitations of the claims (Brief at 14-15). In accordance with § 112, ¶ 6, the Examiner must look to the specification and construe the “means” language as limited to the corresponding structure disclosed in the specification and equivalents thereof. *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994)(*en banc*). The first step in construing such a limitation is to identify the function of the means-plus-function limitation. *Texas Digital Systems Inc. v. Telegenix Inc.*, 308 F.3d 1193, 1208, 64 USPQ2d 1812, 1823 (Fed. Cir. 2002). The next step is to identify the corresponding structure in the written description necessary to perform that function. *Id.* Two structures may be “equivalent” for purposes of § 112, ¶ 6 if they perform the identical function, in substantially the same way, with substantially the same result. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1364, 54 USPQ2d 1308, 1315-16 (Fed. Cir. 2000).

Instead of performing the analysis required under § 112, ¶ 6, the Examiner simply finds, in the prior art, heaters which would be capable of, or would inherently perform, the function recited in the claims if placed in the correct environment (Answer at 4 and 5). This sort of analysis was expressly disallowed by *Donaldson*. Moreover, it results in an incorrect result. Just because a heating coil or car heater may, in some circumstances, draw air into a reactor by convection and cause the air to rise past a photocatalyst does not mean the structure located in the prior art devices of Goswami and Yamanaka are corresponding or equivalent structures

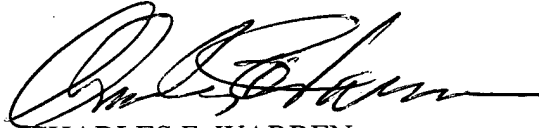
within the meaning of 35 U.S.C. § 112, ¶ 6. The heaters must either have the same structure as the corresponding structure or be an “equivalent”, i.e. perform the identical function in substantially the same way, with substantially the same result.

The Examiner does not find the heaters to have the same structure as the corresponding structure nor has the Examiner advanced a reasonable basis to believe that the heaters of Goswami and Yamanaka, as located in their devices, necessarily perform the identical function as claimed. While the Examiner argues that the air around the heating means of the prior art would have inherently risen (Answer 4), “[a]nticipation by inherent disclosure is appropriate only when the reference discloses prior art that must *necessarily* include the unstated limitation.” *Transclean Corp. v. Bridgewood Services, Inc.*, 290 F.3d 1364, 1372-73, 62 USPQ2d 1865, 1870-71 (Fed. Cir. 2002). “Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing *may result* from a given set of circumstances is not sufficient.” *Mehl/Biophile Int’l Corp. v. Milgraum*, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305 (Fed. Cir. 1999)(quoting *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981)). *See also Glaxo, Inc. v. Novopharm Ltd.*, 830 F.Supp. 871, 874, 29 USPQ2d 1126, 1128 (E.D. N.C. 1993), *aff’d*, 34 USPQ2d 1565 (Fed. Cir.), *cert. denied*, 516 U.S. 988 (1995)(“[I]t is not sufficient that a person following the disclosure sometimes obtain the result set forth in the claim, it must invariably happen.”). Although it is possible that the heaters of Goswami and

REVERSED



BRADLEY R. GARRIS  
Administrative Patent Judge



CHARLES F. WARREN  
Administrative Patent Judge



CATHERINE TIMM  
Administrative Patent Judge

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